

BUREAU OF ENVIRONMENT CONFERENCE REPORT

SUBJECT: Monthly SHPO-FHWA-ACOE-NHDOT Cultural Resources Meeting

DATE OF CONFERENCES: August 13, 2020

LOCATION OF CONFERENCE: John O. Morton Building

ATTENDED BY:

NHDOT

Joe Adams
Sheila Charles
Ron Crickard
Jill Edelmann
Sarah Large
Marc Laurin

NHDHR

Laura Black
David Trubey

USACE

Rick Kristoff

GM2

Seth Hill

Hardesty & Hanover

Kimberly Smith

McFarland Johnson

Jennifer Zorn

TRC

Vicki Chase

VHB

Greg Bakos
Quinn Stuart

Town of Pelham

Jeff Gowen

PROJECTS/PRESENTATIONS REVIEWED THIS MONTH:

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August 13, 2020 - Due to the Covid 19 Event, this meeting was a scheduled Zoom Meeting

Plaistow-Kingston 10044E, X-A000(378)

Participants: Jennifer Zorn, Seth Hill, and Marc Laurin

Jennifer Zorn provided a brief overview of the project history. The overall Plaistow-Kingston, 10044 project (R&C 10267) was 6 miles in length and previously designed, and has been vetted through the NEPA process and Public Hearing process in 2004/2005. Most of the overall project has been constructed, with the exception of Contract E, the project at-hand. Contract E is the widening of NH 125 from just north of the Old County Road intersection in Plaistow to just south of Newton Junction Road/Hunt Road intersection in Kingston and is approximately 1.8 miles in length. A redesign of this last section has been done due to the decrease in actual projected traffic volumes. This current design calls for a reduction in the project's footprint from the previously proposed 5-lane roadway. The current design call for a 3-lane roadway where the center lane is a dedicated two-way left turning lane.

Above Ground Resources:

The Elden-Mathews Cottage located at 56 NH 125 (Kingston) is eligible for the National Register. Impacts to the property are not proposed; however, the adjacent lot to the north is an active stormwater BMP site that is proposed for expansion (currently owned by the NHDOT). Based upon the Effect Table, prepared by

Preservation Company, the Elden-Mathews Cottage will not be affected (confirmed by Laura Black/DHR on June 25, 2020 via email correspondence). In addition, the project area does not encroach upon the Newton Junction Historic District (located south of the intersection of NH 125 and Newton Junction Road).

An inspection of the corridor was done by Marc Laurin and Sheila Charles for the presence of stone walls. Thirty walls were found, but only five would qualify for reconstruction (one wall is outside the project limits within the Newtown Junction Historic District). Images of the five walls were review and discussed.

- The stone wall along the east side of Diamond Oaks Road (parcel 288) will be disturbed due to the necessary roadway improvements. This stone wall will be identified for reconstruction in the environmental commitments section of the re-evaluation of the EA and appropriate note will be added to the project design plan.
- The stone walls along the western and northern perimeter of the Happy Hollow Cemetery (parcel 286) will not be disturbed, however, the environmental commitments will state that a qualified archaeologist must be present during construction activities within 25 feet of the cemetery.
- The stone wall located along the driveway of the Elden-Mathews Cottage (parcel 6) will not be disturbed. GM2 plans to survey-locate the easternmost portion (nearest to NH 125) of the stone wall so its location can be accurately depicted on the project design plans.
- The ornamental stone wall display along the frontage of Landscaping Depot (parcel 52) is not historic, however, Seth Hill will coordinate with NHDOT on the existing encroachment agreement and update the design plans and environmental commitments, as needed.
- The stone wall located at 5 Newton Junction Road is within the Newton Junction Historic District but outside the project limits and will not be impacted.

Below Ground Resources:

The Phase 1A/1B and Phase II End-of-Field Report was completed by Independent Archaeological Consultants, Inc. (IAC) and submitted to NHDOT for review on August 3, 2020. IAC's conclusions were the following:

- Noyes-Stevens site (27-RK-434) – not eligible for NRHP, no further survey recommended
- Little River 1 site (27-RK-435) – not eligible for NRHP, no further survey recommended
- Parcel 287 site – no pre-contact or post contact archaeological resources were found, no further survey recommended

FHWA, NHDOT, and NHDHR concurred with the conclusions stated in this report. In addition, there was agreement that due to the avoidance of above ground resources and the findings by IAC, the project review would result in a determination of no effect. Jennifer Zorn will provide a template to Jill Edelmann for her use in the developing the final effect memo.

Woodstock 27713, X-A003(597)

Participants: Vicki Chase, TRC; Kimberly Smith, Hardesty and Hanover; Joe Adams, Sarah Large, NHDOT

Initial Consultation for the rehabilitation of bridge No. 177/148 carrying NH 175 over the Pemigewasset River in Woodstock, NH. Hardesty and Hanover presented additional information including elements that need replacement or repair, alternatives under consideration, and feedback pertaining to the RPR recommendations/comments (April 15, 2019).

Kim Smith provided a presentation on the elements of the bridge that were deficient and needed replacement. The bridge is a 175' single span steel through tied-arch bridge built in 1939, and was found eligible for the NR on November 13, 2019. Element recommended for strengthening are:

- Stringers
 - Load Rating – Inadequate for Legal Load; Condition – Heavy Corrosion and Section Loss; Recommendation – Replacement in Kind
- Floorbeams
 - Load Rating – Inadequate for Legal Loads; Condition – Heavy Corrosion and Section Loss; Recommendation – Replacement in Kind
- Cable Tie
 - Load Rating – Inadequate for Legal Loads; Condition – Fair, Broken Wires; Recommendation – Replacement – current system is one tie per arch, non-redundant. Two options, could have a temporary tie on the outside or significant scaffolding on the riverbed to support the bridge while it is repaired.
 - Option 1) modify the cable system so that there would be two cables per arch.
 - Option 2) would be to replace the tie at a higher location, retain the lower cable for aesthetic purposes.
- Steel Arch is in good shape, clean and paint entire arch.
- Hanger Pins are recommended for replacement.
- Deck – open steel grid in poor condition. Open grid provides no protection to floor system framing. Three alternatives: Exodermic deck, light weight concrete, or half-filled grid deck.
- Bridge Rail & Curb – poor condition, sub-standard – recommend replacement with T3 Steel bridge rail & concrete curb.
- Concrete Parapets – 3 of 4 are replacements - Concrete parapets on approaches would be reconstructed to match the face of the new rail.
- Abutments – patch and coat

L. Black noted that the significance of the bridge is tied to the engineering design, so proposed changes should be reviewed in terms of how they will affect those design elements. Inventory is not specific about which elements are character-defining. L. Black stated that this is broad guidance, not specific to particular elements. The goal should be to change as little as possible while still meeting the purpose and need.

K. Smith noted that the adjustment of the cable tie would probably be seen as the biggest change in the engineering. Other elements would be replaced in kind with higher strength steel and the design style wouldn't change. J. Adams agreed that the cable tie was probably the biggest design change.

The grid deck is problematic from a maintenance perspective, so its replacement is necessary. L. Black commented that likely the open grid deck does not represent a critical design element, but she doesn't know. L. Black suggested that would be a good point of inquiry. K. Smith stated that open grid decks were typically installed as a way to reduce weight on the structure. The alternative decks presented are heavier than the existing deck requiring strengthening to some elements, however they are lighter weight than a traditional concrete deck. L. Black stated that the overall goal is to change design as little as possible, but she does not have specific directives.

L. Black inquired, why is the design is going from 6 stringers to 5? K. Smith responded that they can be adjusted, new structures generally have a stringer down the center, which has to do with where the railing face would be. Steel is much stronger now so the depth of the stringer can be matched to the existing depth. L. Black commented that "in-kind" from a cultural resource perspective would mean same materials, same number of stringers, same design.

L. Black inquired about the steel safety walk. K. Smith stated that it is still being discussed as to how it would be matched. L. Black commented that on some other bridges, such as the Lyme Thetford bridge (NHDOT 14460), the steel curb and rail system was an important design element. [Note: The Lyme-Thetford did not have a “safety walk”. It had a steel curb and rail system which was of interest.]

L. Black stated that leaving the cable tie where it is would be desirable, but adding another one changes the design feature. Her instinct would be to replace in kind at its current location, keeping the redundant cable along same plane so it is not obvious. Also, under Option 2, if existing cable is left as an aesthetic feature, will it just be cut off at some point? J. Edelmann agreed that if cable is left in place as an aesthetic feature, it should be documented so it is not removed later.

D. Trubey asked if a staging area will be located? K. Smith noted that the bridge will likely be closed so there will be staging on either end. D. Trubey noted that if a new staging area is located, archaeological survey may be required (as noted in response to RPR). S. Charles concurred that there are several archaeological sites along the Pemigewasset.

J. Edelmann said that effects can’t be determined until design is defined. Kim suggested that a discussion should happen within DOT bridge design about the roadway width which will help determine the stringer design.

L. Black reinforced the idea that character-defining features should be listed out. What stands out about this bridge related to similar bridges?

S. Large inquired whether the project would come back to a cultural resource meeting when alternatives have been selected? K. Smith responded yes, that she had received helpful direction on the cables, and the next issue will be the stringers.

Pelham 41751, X-A004(739)

Participants: Greg Bakos, Quinn Stuart, VHB; Jeff Gowan, Pelham Town Planner; Ron Crickard, NHDOT

Consultation on project impacts and RPR responses pertaining to the proposed intersection improvements at NH 128 & Shelburne Road and Mammoth & NH 111A. The meeting’s purpose was to review NHDHR’s response to the project RPR.

Archaeology:

An archaeological Phase 1A survey needs to be completed before comment can be made by NHDHR.

VHB will proceed with hiring a sub consultant to perform the Phase 1A survey.

Above Ground Inventories:

Group (Laura B, Jill E, and Quinn S) achieved a consensus that inventory forms at 93 Mammoth Road and 212 Marsh Road are warranted based on the scope of work.

- Decision was made to prioritize these two forms, pending additional information on the status of the 157 Mammoth Road subdivision (see notes below).
- **Quinn** will proceed with the inventory forms for 93 Mammoth and 212 Marsh Roads

Potential Impacts at 157 Mammoth Road

Laura B:

- What are the potential visual impacts at 157 Mammoth Road even though it is set further away from the actual project area? Visual impacts would not necessarily be an adverse effect. It was noted that the

proposed roundabout is not visible from the existing house through the woods that stand between the project and the house.

- What are the physical and ROW impacts?
 - What is being acquired at 157 Mammoth Road? Is the proposed acquisition along Mammoth Road outside the existing ROW?
 - VHB responded: Yes, there will be permanent and temporary ROW impacts to concentrated in the vicinity of the existing intersection to accommodate the proposed roundabout.
 - Does this trigger a 4(f) assessment, which cannot be done without the inventory of 157 Mammoth Road? **Jill E** will talk to Jamie (FHWA, not an attendee) re: 4(f).
- Knowledge of the boundaries of the project in relation to the properties is needed to make an informed decision on potential impacts.
 - Where is the boundary of the historic resource and not just the property boundaries as they exist now?
 - Need to have a logical boundary of the resource including the setting of the house and other uses of the land.
 - Sheila C: The archaeological review of the project area may help with the history of land uses.

Development of Subdivision at 157 Mammoth Road:

Jeff G: The plan for the subdivision has already been approved by the planning board, just waiting for final recorded plan.

Greg B: If the subdivision moves forward, will the property at 157 Mammoth Road no longer be a concern for this project from a cultural resources perspective?

Laura B: We have to look at the landscape as it exists now. We also have to look at the raw land that we know was historically associated with the historic resources. The inventory could include more than one parcel. When construction of the subdivision actually happens, and not necessarily just land acquisitions, is when the property would truly be disassociated with the house.

Other:

If subdivision moves forward prior to project planning being complete, VHB will inform NHDHR of changes and then NHDHR could reassess the inventory recommendation.